

REMARKS/ARGUMENTS

Claims 1, 2, 4, 5, 8-10, 12, 13, and 16-29 are pending in the present application. Claims 1, 9, 17, and 23 are amended. Claims 24-29 are new. Claims 1, 9, 17, and 23 independent claims.

Allowable Subject Matter

It is gratefully acknowledged that the Examiner considers the subject matter of claim 23 as being allowable if rewritten in independent form. Although not conceding the appropriateness of the Examiner's rejections, claim 23 has been rewritten in independent form to include the features of independent claim 17 and intervening claim 22. Accordingly, Applicants respectfully submit that claim 23 is now in condition for allowance.

Claim Objections

The Examiner objected to claims 9 and 23 for various informalities. In particular, the Examiner points out that in claim 9, an extra semicolon should be removed. The Examiner further indicates that claim 23 includes insufficient antecedent basis for "the first ASIC" in line 2 and "the second ASIC" in line 5.

Applicants respectfully submit that claims 9 and 23 have been amended to correct these informalities. Accordingly, Applicants request the Examiner to withdraw these objections.

Synopsis of the Invention

Exemplary embodiments of the present invention are directed to a method and system in which multiple interface card 710, 720 and a cross-connect card are inserted into slots of a backplane 700 in a switch device. In particular, each of the interface cards is coupled to a corresponding network. In an exemplary embodiment, one of the interface cards is configured to receive data from its network, and convert the data into SONET/SDH format. The interface card sends the SONET/SDH formatted data as serial data signals to the cross-connect card via the backplane, so that the cross-connect card can perform various switching functions to make the data suitable for another network (which is coupled to another one of the interface cards). The cross-connect card then sends the data to the other interface card as serial data signals over the backplane.

Some advantages of the present invention include flexibility and expandability offered by the switch device. Particularly, since each interface card transmits or receives SONET/SDH formatted data, and the cross-connect card processes

SONET/SDH formatted data, any type of interface card can be inserted into any non-cross-connect slot in the backplane. This provides interchangeability of the interface card in the slots. As a result, users of the switch device are not limited to using predetermined sets of cards with predetermined sets of slots. See, e.g., specification at page 18, line 22 - page 19, line 4.

Rejection Under 35 U.S.C. § 102

Claims 1, 2, 4, 5, 8-10, 12, 13, 16, 17, and 21 stand rejected under 35 USC § 102(b) as being anticipated by U.S. Patent No. 4,967,405 to Upp et al. (hereinafter Upp). This rejection is respectfully traversed.

Independent claims 1, 9, and 17 each recite a first card coupled to a first network, a second card coupled to a second network, and a cross-connect card. Furthermore, these claims each recite that SONET/SDH formatted data is transmitted or carried between the first, second, and cross-connect card via a backplane.

In the outstanding Office Action, the Examiner asserts that Upp discloses a first card in the form of a combined system of ADM 700a-700d, and SBI 600, as illustrated in Figs. 6-7. See Office Action at page 3. The Examiner further asserts that Upp discloses a cross-connect card in the form WBX module 800 and

VTX module 900. *See* Office Action at page 4. Also, the Examiner asserts that Upp discloses a second card as the SONET line interface 100 (which interfaces with the STS-24 signals). *See* Office Action at pages 4-5. In addition, the Examiner states that the system of data buses interconnecting all of these elements in Upp's system 10 can be interpreted as the claimed backplane. *See* Office Action at pages 3-4.

Applicants respectfully submit that it is understood by those of ordinary skill in the art that the data buses interconnecting the aforementioned elements in Upp's system cannot be interpreted as a backplane. As is readily known to those of ordinary skill in the art, a backplane is a surface board including sockets or slots into which other cards are plugged, and a common communication line connecting the other cards. As such, a backplane utilizes a common signal scheme to communicatively connect each of the cards plugged into it.

Conversely, Upp discloses various different types of communication lines interconnecting the SONET line interface 100 with the cross-connect modules 800 and 900, and the various ADM modules 700. Specifically, Upp discloses that some of the lines connecting these modules are formatted for serial signals, and others are formatted for parallel signals. *See*, e.g., column 6, lines 19-27 and column 11, lines 57-61. Also, Upp discloses that

these lines are operated at different bit rates (See e.g., column 9, lines 48-51 and 63-67; and column 11, lines 57-61). It is clear that Upp fails to disclose a backplane carrying data between a first card, second card, and cross-connect card.

However, in an effort to clarify the claimed invention even further, Applicants have amended the independent claims to recite that the backplane utilizes a common signaling scheme to communicatively connect the first, second, and cross-connect cards. Applicants respectfully submit that this amendment is not a concession as to the appropriateness of the Examiner's rejection. Instead, Applicants have amended the independent claims in order to clarify the claimed invention and expedite prosecution in the present application.

As indicated by § 2131 of the MPEP, a claim is anticipated only if each and every recited element is found, either expressly or inherently in a single prior art reference. At least for the reasons set forth above, Applicants respectfully submit that independent claims 1, 9, and 17 are not anticipated by Upp, and are therefore allowable. Furthermore, Applicants submit that claims 2, 4, 5, 8, 10, 12, 13, 16, and 21 are allowable at least by virtue of their dependency on allowable claims 1, 9, and 17. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

Rejection Under 35 U.S.C. § 103

Claims 18-20 and 22 stand rejected under 35 USC § 103(a) as being unpatentable over Upp in view of well-established teaching in the art. Specifically, the Examiner admits that Upp fails to explicitly disclose an application specific integrated circuit (ASIC) in the first card. *See* Office Action at page 9. However, the Examiner asserts that it would have been obvious in view of well-established teaching in the art to include an ASIC in each of the first and second cards. *See Id.*

Applicants do not concede that such modification of Upp would have been obvious. However, even assuming for the sake of argument that such modifications would have been obvious. Applicants respectfully submit that these modifications do not remedy the deficiencies of Upp, as set forth above in connection with independent claims 1, 9, and 17. Accordingly, Applicants respectfully submit that claims 18-20 and 22 are allowable at least by virtue of their dependency on independent claim 17.

New Claims

Claims 24-29 are new. Applicants respectfully submit that these claims are allowable at least by virtue of their dependency on allowable claims 1 and 17. Furthermore, Applicants

respectfully submit that these claims do not add any new matter to the present application.

Conclusion

In view of the above remarks, Applicants respectfully submit that all of the pending claims are in condition for allowance. As such, Applicants respectfully request the Examiner to reconsider the various rejections and issue a Notice of Allowance in the present application.

Should the Examiner believe that any outstanding matters remain in the pending application, the Examiner is requested to contact Jason W. Rhodes (Reg. No. 47,305) at the telephone number of the undersigned in order to conduct an interview to expedite prosecution in the present application.

Pursuant to the provisions of 37 CFR 1.17 and 1.136(a), Applicant respectfully petitions for a one (1) month extension of time for filing a response in connection with the present application. The required fee of \$110.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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